

N<sup>o</sup> 25,169



A.D. 1911

Date of Application, 11th Nov., 1911

Complete Specification Left, 13th May, 1912—Accepted, 7th Nov., 1912

### PROVISIONAL SPECIFICATION.

#### Improvements in, and relating to, Ladies' Headgear.

I, NORAH EDITH HUGHES-MAIONE, of 12, Little Newport Street, in the County of London, Milliner and Costumier, do hereby declare the nature of this invention to be as follows:—

The object of my invention is to provide a collapsible head-covering which  
5 may be folded up or closed when out of use, and unfolded or opened for use, without disturbing the drapery, whereby many benefits accrue since, for instance, such a head-covering can be adopted for theatres and other public places or for travelling where the ordinary head-covering is inconvenient.

To achieve my purpose I construct a frame or "shape" of members that can be  
10 collapsed or distended and be retained in either condition, and on them the usual drapery is arranged and adapted to accomodate itself to the movements thereof.

Such members may be of various constructions and arrangements; thus, for example, they may be hinged together; or they may be of such character  
15 as to be capable of contracting and expanding on the application and release of pressure.

I will now describe the practical application of my invention.

By one way I employ a number of members of ordinary covered wire, and each of an arched or semi-circular contour. I assemble these members so that  
20 the free ends at each side are more or less in alignment and through these ends I pass directly or indirectly a suitable pivot. Means are applied in connection with the pivots for maintaining or locking the members in the full-open position. I connect each member to its neighbour or neighbours at suitable intervals by a flexible medium, such as tape or coiled wire. The whole therefore constitutes  
25 a frame or "shape", and upon the members and the medium I secure the drapery so as to move in unison therewith.

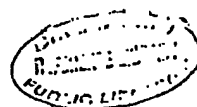
A suitable form of lock comprises a disc mounted on the pivot, and a pair of segmental plates each of which is centered on the pivot. To the free end of  
30 one of these plates I connect the extremity of one extreme member, and to the corresponding end of the other plate I fasten the extremity of the other extreme member. Thus these plates serve to connect the members to the pivot which are, therefore, attached indirectly, and, of course, the plates and members move as one piece. Projections are provided upon the plates for co-acting with depressions in the disc, the function of these projections and depressions being to  
35 engage when the members are fully opened and thereby lock them in such position. The arrangement is preferably such that the engagement is by a snap-like action, hence to guide the projections into the depressions the edge of the disc is suitably shaped. A pin is provided upon the disc to serve as a stop to the plates when the members are fully opened.

40 In a modification, only one plate is employed in connection with one extreme member, the other extreme member being secured to the disc.

Thus in the first arrangement the members may be closed from either the back or front of the head-covering, whereas in the other case they are closed only from the side where the member is connected to the plate.

45 Thus the members may be turned as a whole on the pivots to extend or collapse

[Price 8d.]



*Hughes-Mahone's Improvements in, and relating to, Ladies' Headgear.*

the head-covering to meet the desired use, and when in the extended position maintenance is ensured by the locking means at the pivots.

By another way of carrying my invention into practice I may construct all or some of the members as spiral springs, hinging some of them or not as explained. Thus the covering may be wholly or mainly collapsed and extended 5 by compressing and releasing the members.

Dated this 11th. day of November, 1911.

UNIVERSAL PATENTS BUREAU LIMITED,  
20, Copthall Avenue, London, E.C.,

B. KUETTNER,

Managing Director,  
Agents for Applicant.

10

## COMPLETE SPECIFICATION.

**Improvements in, and relating to, Ladies' Headgear.**

I, NORAH EDITH HUGHES-MAHONS, of 12, Little Newport Street, in the County 16  
of London, Milliner and Costumier, do hereby declare the nature of this inven-  
tion and in what manner the same is to be performed, to be particularly  
described and ascertained in and by the following statement:—

My invention relates to ladies' head-coverings of the collapsible type, that is  
to say of the kind which can be folded-up or closed when out of use and unfolded 20  
or opened for use, without disturbing the drapery, such head-coverings being,  
therefore, particularly adapted for theatres and other public places or for  
travelling, where the ordinary head-covering is inconvenient.

Such head-coverings comprise, essentially, a frame or "shape" composed of a  
series of arched or semi-circular members (assimilating ribs) which are hinged 25  
or pivoted together at the two sides of the head-covering so that they can be  
collapsed or distended without prejudicially affecting the drapery arranged on  
them in such manner as to accommodate itself to the movements thereof.

In some constructions no means are provided for retaining the members in  
the distended position, but a provision of this sort is desirable, and in this con- 30  
nection it has been proposed to apply an extensible device consisting of a series  
of hinge-jointed elements furnished with stops or the like for maintaining them  
in the extended position, the alternate hinges or joints being secured to the  
members forming the frame or "shape". This device, which, in the mechanical  
sense, may be considered as being of the hinged-rule class, is situated at a 35  
point distant or remote from the pivotal points or hinges of the frame or "shape"  
members and, therefore, has no direct connection or relationship therewith.  
Consequently, in practice, this device necessitates a "start" being manually  
or independently given to it when in the extended position in order that the  
frame or "shape" can be closed, since it may be said a "dead centre" exists, 40  
and even such an operation may be necessary to procure the extended position,  
both of which involves impracticable actions if the drapery is not to be dis-  
arranged having regard to its intended combination therewith.

According to my invention I, too, construct a frame or "shape" *per se*, in  
substantially the known fashion, and I further provide, as is already known, 45  
means for maintaining the constituent members of the frame or "shape" in  
their distended position, but these means I constitute by devices forming either  
indirectly or directly parts of some of the members and situated at or in close  
proximity to their pivotal points or hinges, whereby I obtain a complete  
structure wherein the opening and closing of the members of the frame or 50

*Hughes-Mahone's Improvements in, and relating to, Ladies' Headgear.*

"shape" effect the positive and synchronous operation of the locking means, and, therefore, without any "starting" actuations being necessary. Thus I provide a complete head-covering of a simple and compact construction, wherein the locking and unlocking of the frame or "shape" members are automatically accomplished, and one in which the operations are, further, effected with the minimum of trouble and with also the minimum possibility of the drapery being disarranged or disturbed.

I will now describe my invention with reference to the accompanying drawings which show several forms thereof, all in the distended position with the exception of Figure 5, and whereof:—

Figure 1 is a perspective view of one form and Figure 2 is a front elevation thereof, whilst Figures 3, 4 and 5 are, respectively, a fragmentary side elevation, a fragmentary end elevation, and a fragmentary side elevation representing certain details on a larger scale, Figure 5 corresponding to Figure 4 but showing a partially collapsed condition.

Figures 6, 7 and 8 are, respectively, a fragmentary side elevation, a corresponding end elevation, and a detail end elevation of another form.

Figure 9 is a fragmentary side elevation of a further form, and Figure 10 is a plan of the same.

Figure 11 is a perspective view of another form, and Figure 12 is a front elevation thereof, whilst Figures 13 and 14 are, respectively, a fragmentary side elevation and a corresponding plan on an enlarged scale of details thereof.

Figure 15 is a fragmentary side elevation of a still further form.

The same numerals of reference are employed throughout to denote the same or corresponding parts.

According to the various examples illustrated, I employ a number of members 1—1 of ordinary covered wire, and each of an arched or semi-circular contour. The precise contour is, of course, determined by the type of headgear as is exemplified by Figures 1 and 2 and by Figures 11 and 12 which show, respectively, a bonnet and a hat. I assemble these members 1—1 so that the free ends at each side are more or less in alignment and through these ends I pass directly or indirectly a suitable pivot 2. Means 3, 3 are applied in connection with the pivots 2, 2 for maintaining or locking the members 1—1 in the full-open position. As shown in Figures 1, 2, 11 and 12, I connect each member 1 to its neighbour or neighbours at suitable intervals by a flexible medium 4, such as tape or coiled wire, so as to ensure their movement in concert. The whole, therefore, constitutes a frame or "shape", and upon the members 1—1 and the medium 4 I secure the drapery so as to move in unison therewith.

As represented in Figures 1, 2, 3, 4 and 5 one form of lock comprises a disc 5 mounted on the pivot 2 so as to constitute an integral part thereof (as indicated in Figure 8), and a pair of segmental plates 6, 6 each of which is centered on the pivot 2. To the free end of one of these plates 6, 6 I connect the extremity of one extreme member 1, and to the corresponding end of the other plate 6 I fasten the extremity of the other extreme member 1. Thus these plates 6, 6 serve to connect the members 1, 1 to the pivot 2 which are, therefore, attached indirectly, and, of course, the plates 6, 6 and members 1, 1 move as one piece, and consequently also the other members 1—1 due to the connection 4. Projections 7, 7 are provided upon the plates 6, 6 for co-acting with depressions 8, 8 in the disc 5, the function of these projections 7, 7 and depressions 8, 8 being to engage when the members 1—1 are fully opened and thereby lock them in such position. The arrangement is preferably such that the engagement is by a snap-like action, hence to guide the projections 7, 7 into the depressions 8, 8 the edge of the disc 5 is or may be suitably shaped as indicated at 9, or the same effect may be secured by the inherent resiliency of the projections 7, 7 when of such a character. A pin 10 is provided upon the

*Hughes-Mahone's Improvements in, and relating to, Ladies' Headgear.*

disc 5 to serve as a stop to the plates 6, 6 when the members 1—1 are fully opened:

In a modification, as depicted in Figures 6, 7 and 8, only one plate 6 is employed in connection with one extreme member 1, the other extreme member 1 being secured to the disc 5.

Thus in the first arrangement (Figures 1, 2, 3 and 4) the members 1—1 may be closed from either the back or front of the head-covering, whereas in the other case (Figures 6 and 7) they are closed only from the side where the member 1 is connected to the plate 6.

Thus the members 1—1 may be turned as a whole on or about the pivots 2, 2 to extend or collapse the head-covering to meet the desired use, and when in the extended position maintenance is ensured by the locking means 3, 3 at the pivots 2, 2, such locking means being formed by indirect parts of the extreme members 1, 1.

The pivot 2, disc 5, plates 6, 6 and pin 10 are of any suitable metal or material affording the requisite lightness and strength.

The extreme members 1, 1 are secured to the plates 6, 6, or to the plate 6 and disc 5, by brazing or otherwise, whilst the ends of the other members 1—1 are fashioned as loops or eyes to receive the pivot 2.

The projections 7, 7 and the depressions 8, 8 may be variously obtained. Thus they can both be produced by stamping or punching action as in Figures 1, 2, 3, and 4, or, as in Figures 6 and 7, only the depressions 8, 8 may be so obtained, the projections 7, 7 being constituted by prolonging the end of the member 1 beyond the edge of the plate 6 and bending it over, the natural resiliency of the member procuring the desired snap action.

Now as to Figures 9 and 10. Here, though only the two extreme members 1, 1 are shown, all the members are centered on the pivot 2. The ends of the members 1, 1 are fashioned, as illustrated, to constitute the lock 3 themselves in conjunction with their inherent resiliency, that is to say they directly form the locking means. The lock comprises a kink or depression 8 in one member and, as a complement, the normal or straight portion 7 of the other member. When the portion 7 reposes in the kink or depression 8, the distended condition is maintained, whilst when disengagement is effected the collapsed state ensues. The folding and opening operations can be effected from both the back and front of the head-covering as in Figures 1 and 2.

Next as to Figures 11, 12, 13 and 14. In the construction represented, all the members 1—1, with the exception of one extreme member 1, are centered on the pivot 2 which is combined with a plate 5 after the fashion of the disc 5 shown in Figures 1, 2, 3 and 4 and in Figures 6 and 7. The extreme member 1 is connected to one end of the plate 5 in the same, or in a similar, way as the like member 1 is secured to the disc 5 illustrated in Figures 6 and 7. The other extreme member 1 is adapted to constitute the lock 3 with the corresponding end of the plate 5. For this purpose the plate 5 is formed with a depression 8 into, and from, which, as a complement, the portion 7 of the member is adapted to be sprung under its own resiliency to respectively maintain the distended position or admit of the collapse. Here the locking means 3, 3 are directly and indirectly formed by the members 1, 1. As in the arrangement shown in Figures 6 and 7, closure is effected from the hinged extreme member 1.

Lastly as to Figure 15 which illustrates a form wherein only the two extreme members 1, 1 are centered on the pivot 2, some of the remainder being directly connected to them whilst the rest are indirectly connected. The extreme members 1, 1 and lock 3 are arranged and constituted as described with reference to Figures 9 and 10, hence further explanation is unnecessary. Each of these extreme members 1, 1 is formed with a kink or eye 11 to receive the adjoining end of the next member 1 and thus serve as a hinge therewith. This latter member is likewise formed with a kink or eye 12 to receive the ends of a

*Hughes-Mahone's Improvements in, and relating to, Ladies' Headgear.*

spiral spring 13 to which the other members 1—1 are turnably connected at intervals. Thus when the extreme members 1, 1 are engaged and disengaged at the lock 3 distension and collapse accrue accordingly, the operations being effected from either the back or front.

5 I may construct all or some of the members 1—1 as spiral springs, hinging some of them or not as explained. Thus the head-covering may be wholly or mainly collapsed and extended by compressing and releasing the members.

10 It is evident that in every example the opening and closing of the members 1—1 of the frame or "shape" automatically effects the locking and unlocking, *i.e.*, the actuation of the means 3, 3, without any disarrangement of the drapery, and that the head-covering in every instance is of a very simple and compact nature.

15 Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A collapsible ladies' head-covering comprising a frame or "shape" composed of a series of members pivoted or hinged so that they can be collapsed or distended, in combination with locking means consisting of devices forming indirectly or directly parts of some of the said members and situated at or in close proximity to the pivotal points or hinges thereof, substantially as described.

2. In a collapsible head-covering for ladies, in combination, a frame or "shape" composed of members hinged indirectly or directly upon a common pivot at each side of the covering, flexible media attaching such members at intervals, and locking means constituted indirectly or directly by parts of some of the members at or about the hinges or pivots thereof, substantially as described.

3. In ladies' headgear, the combination of parts constituting a frame or "shape" and a locking device therefor, all arranged, constructed and adapted for use, substantially as described with reference to, and as illustrated in, 30 Figures 1, 2, 3, 4 and 5; or Figures 6, 7 and 8; or Figures 9 and 10; or Figures 11, 12, 13 and 14; or Figure 15 of the accompanying drawings.

Dated this 13th. day of May, 1912.

UNIVERSAL PATENTS BUREAU LTD.,

20, Copthall Avenue, London, E.C.,

B. KUSTNER,

Managing Director,

Agents for Applicant.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1912.

[This Drawing is a reproduction of the Original in accordance with the Act.]

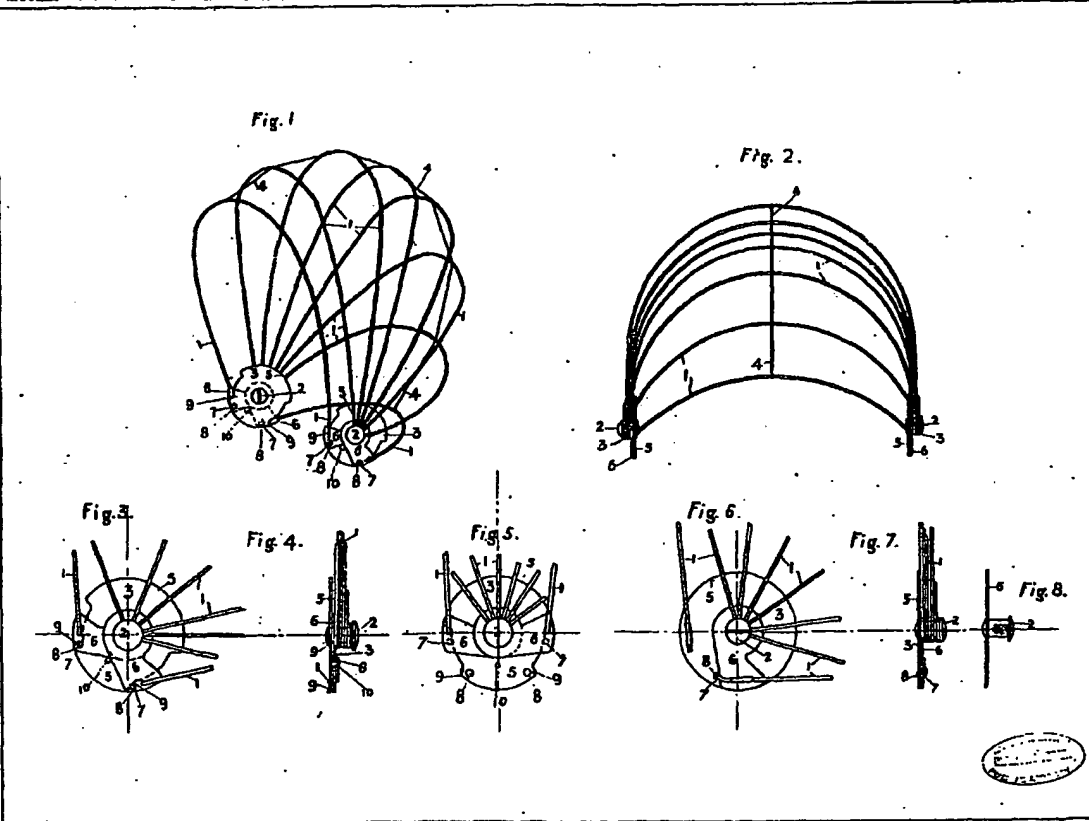
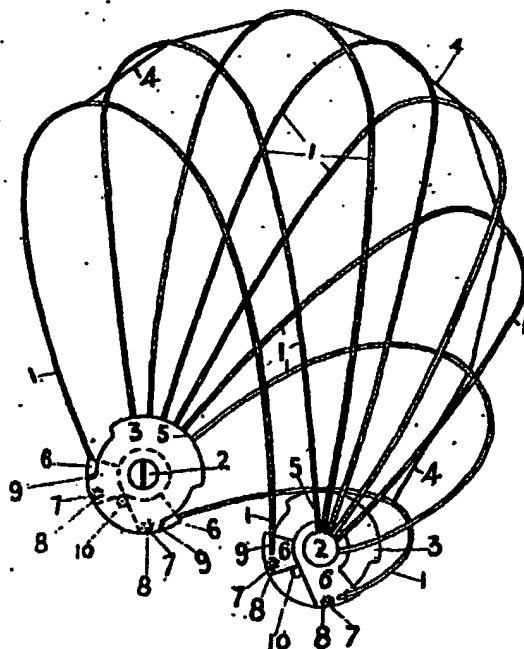


Fig. 1



2.  
3

Fig. 3.

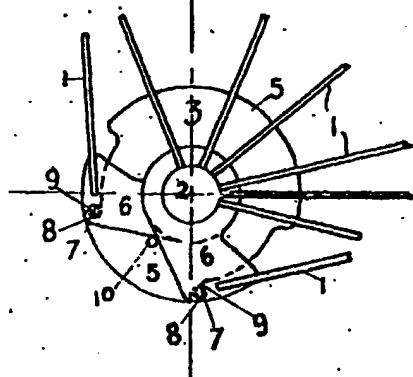


Fig. 4.

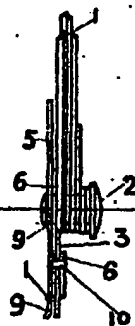
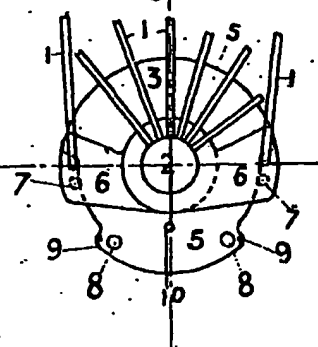


Fig. 5.



[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 2.

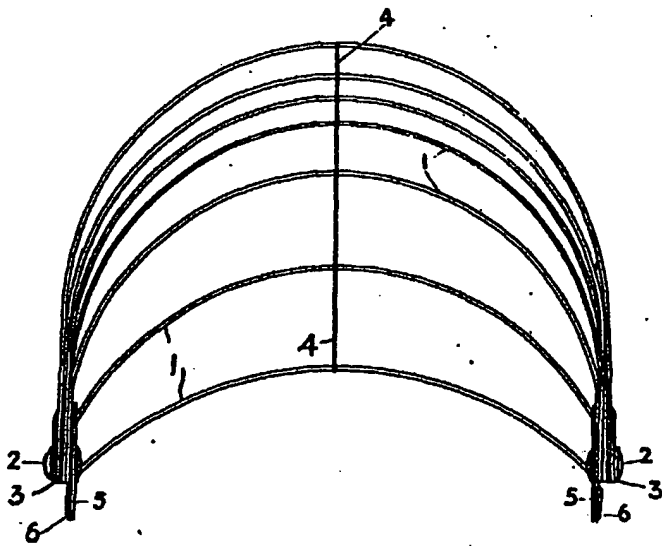


Fig. 6.

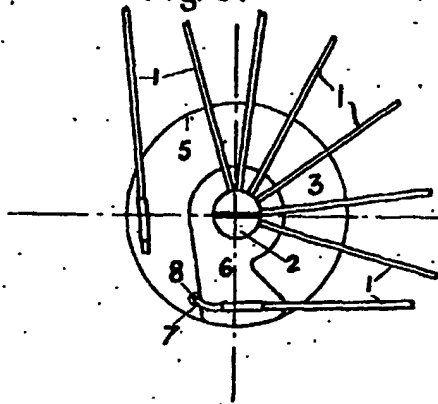
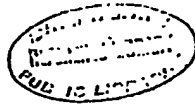
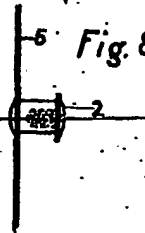


Fig. 7.



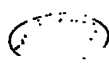
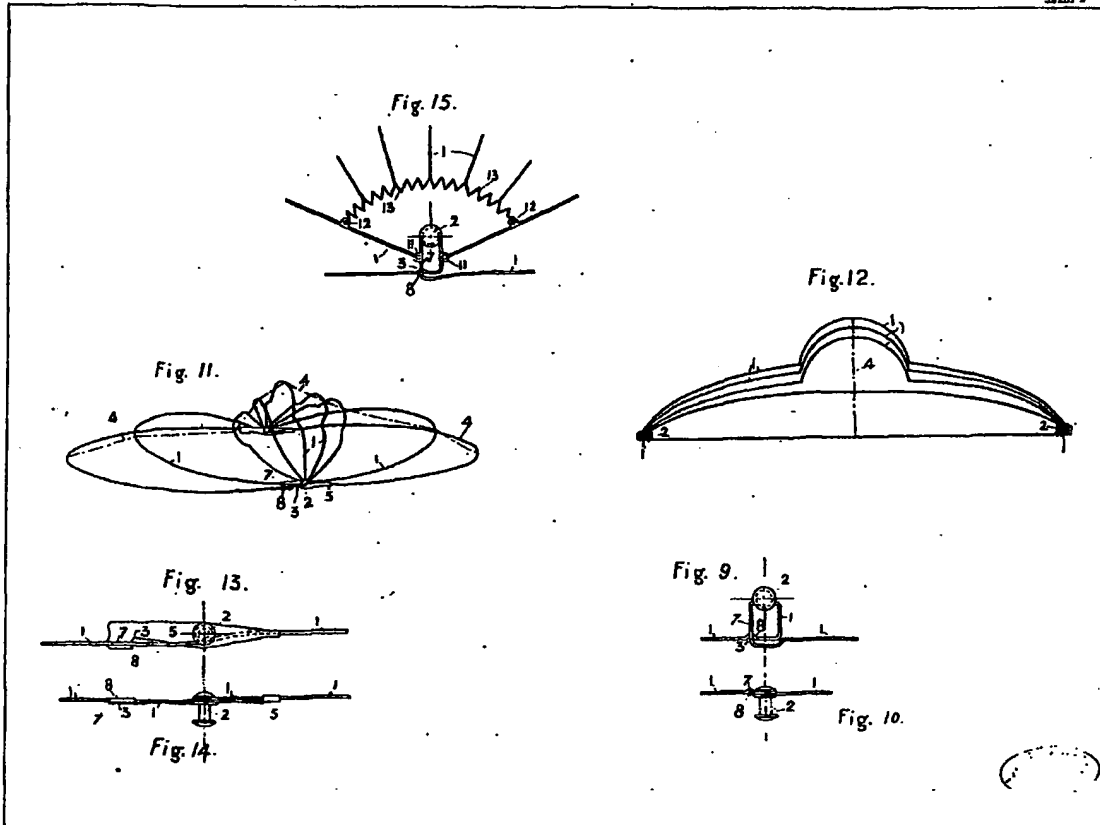
Fig. 8.



Malby & Sons, Photo-Litho.



[This Drawing is a reproduction of the Original on standard rails]



[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 15.

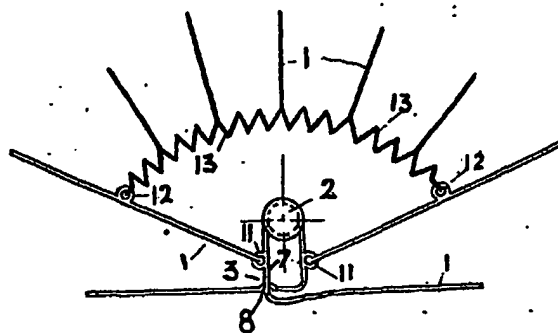


Fig. 11.

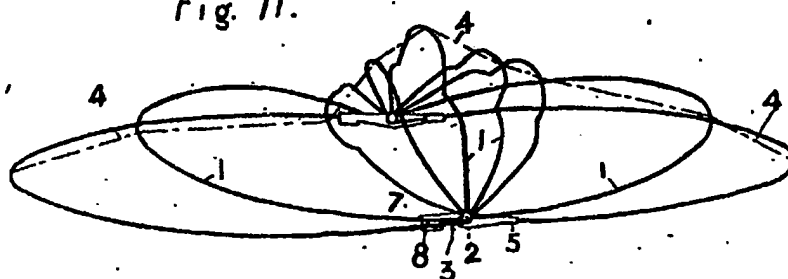


Fig. 13.

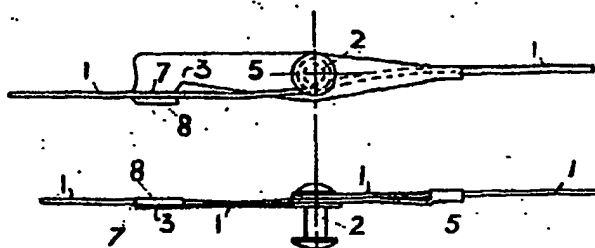


Fig. 14.

Fig. 12.

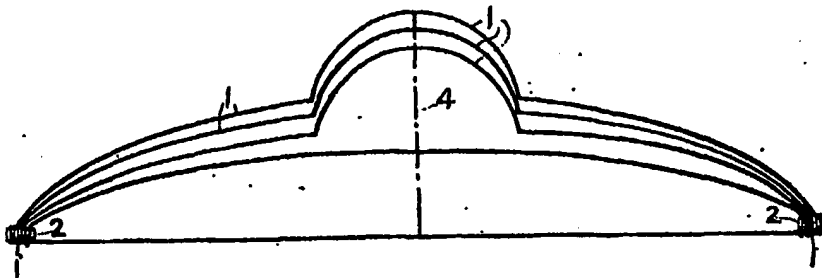


Fig. 9.

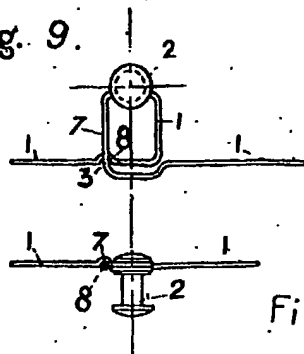
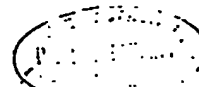


Fig. 10.



Majby & Sons, Photo-Litho.